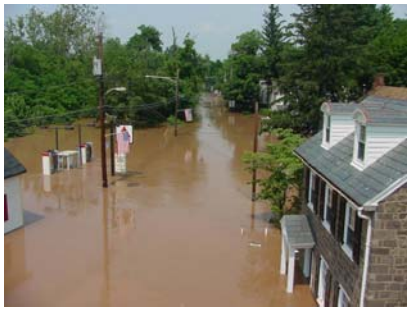
DEVELOPMENT OF A FLOOD ANALYSIS MODEL FOR THE DELAWARE RIVER BASIN



Yardley, Pennsylvania, June 2006

The Delaware River Basin has seen three such floods in less than two years.

Goal:

To develop a basinwide, coordinated flood management/reservoir operating plan that takes advantage of all existing reservoirs. Such a plan could provide a measure of flood mitigation by means of seasonal voids and forecast-based void management. The plan would work in conjunction with the basin's drought management plan that controls reservoir operations during drought conditions, preserving scarce resources while meeting water supply needs. Development of any flood management plan would require approval by the Parties to the 1954 U.S. Supreme Court Decree and DRBC Commissioners.

Need for a New Tool:

Development of a basinwide flood management plan will require development of a new flood routing computer model. Development of such a model will allow for:

- An analysis of alternative reservoir operations and storm events to test the feasibility and effects of various proposals.
- An analysis of the impacts of development on stormwater runoff, as well as impacts of changing rainfall patterns.

Benefit of such a Model:

- It will allow DRBC staff to provide the necessary technical support for the development of a flood management plan for the basin's reservoirs.
- It will allow evaluation of how reservoir voids of varying magnitude can serve to mitigate impacts of flooding at locations downstream from the reservoirs.

Time and Cost Estimates:

- Development of a flood analysis model and associated databases is estimated to cost **$500,000**.
- A one-time direct grant to DRBC would provide the most flexibility and efficiency to complete the project in about **18 months**.

Delaware River Basin Commission
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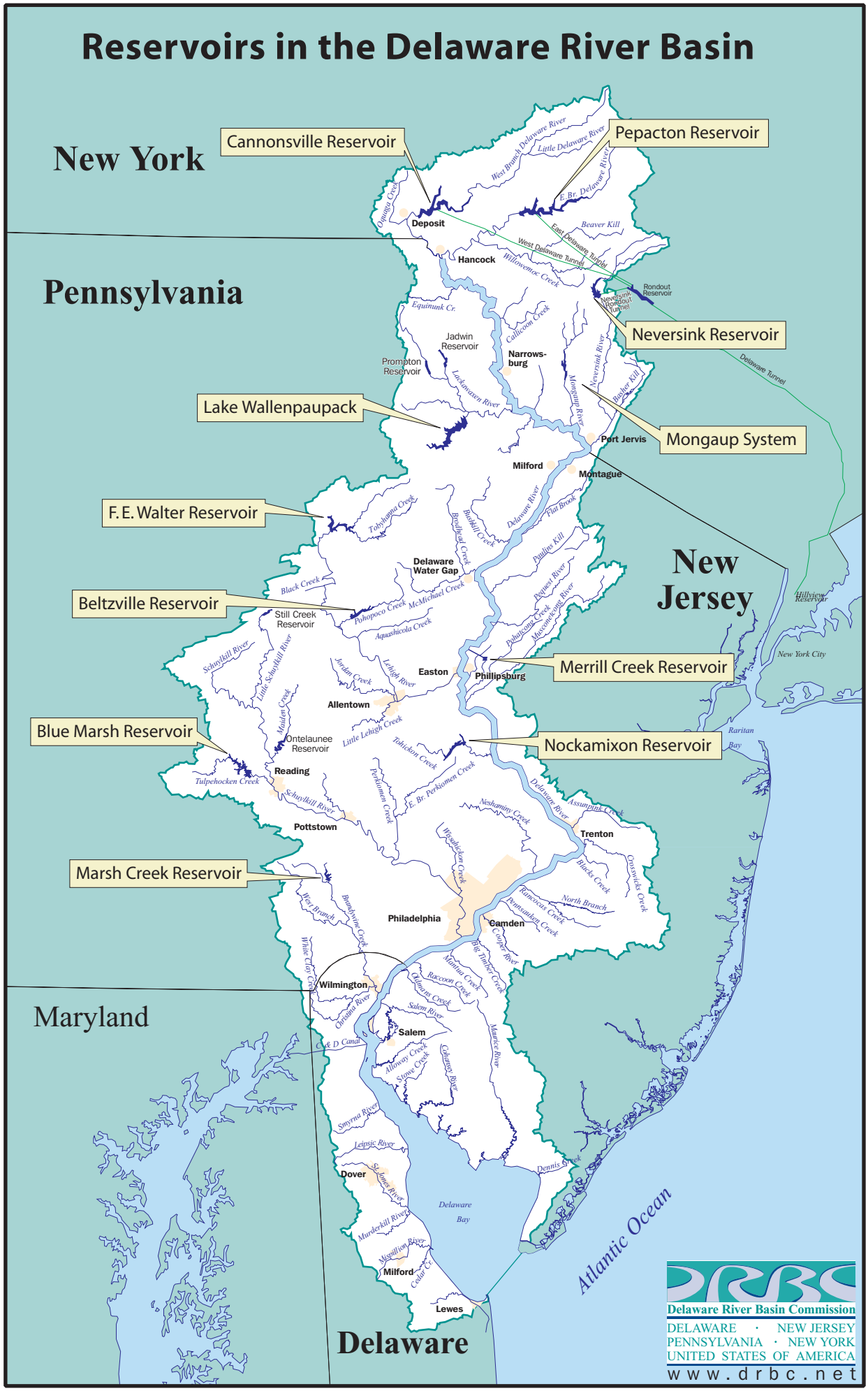
Reservoirs in the Delaware River Basin
New York
Pennsylvania
New Jersey
Maryland
Delaware
Cannonsville Reservoir
Pepacton Reservoir
Neversink Reservoir
Lake Wallenpaupack
Mongaup System
F. E. Walter Reservoir
Beltzville Reservoir
Merrill Creek Reservoir
Blue Marsh Reservoir
Nockamixon Reservoir
Marsh Creek Reservoir
Deposit
Hancock
Jadwin Reservoir
Prompton Reservoir
Narrows-burg
Port Jervis
Milford
Montague
Delaware Water Gap
Still Creek Reservoir
Easton
Phillipsburg
Allentown
Ontelaunee Reservoir
Reading
Pottstown
Philadelphia
Camden
Trenton
Wilmington
Salem
Dover
Milford
Lewes
Rondout Reservoir
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